WHAT IS CLAIMED IS:

1. A load bearing article comprising:

(a) a plurality of elongated shells residing substantially within a common plane, each of said elongated shells being separated one from the other and having exterior surfaces, interior surfaces which define a hollow interior, and a plurality of perforations having edges;

(b) a plurality of internal reinforcing ribs of plastic material located within the hollow interior of each elongated shell, a portion of said internal reinforcing ribs being in abutting relationship with the interior surfaces of each elongated shell;

(c) an external molded structure of plastic material residing between said elongated shells, a portion of said external molded structure being in abutting relationship with at least a portion of the exterior surfaces of said elongated shells; and

(d) a load bearing surface comprising said external molded structure,

wherein,

(i) a portion of the plastic material of said internal reinforcing ribs extends through at least some of said perforations of each elongated shell, the edges of said perforations being embedded in the plastic material of said internal reinforcing ribs extending therethrough, thereby attaching fixedly said internal reinforcing ribs to each elongated shell, and

(ii) a portion of the plastic material of said external molded structure extends through at least some of said perforations of said elongated shells, the edges of said perforations being embedded in the plastic material of said external molded plastic structure extending therethrough, thereby attaching fixedly said external molded plastic structure to said elongated shells and attaching fixedly said elongated shells to each other.

2. The molded article of Claim 1 wherein said elongated shells are substantially parallel with each other.

3. The molded article of Claim 1 wherein said external molded structure comprises a plurality of reinforcing ribs of plastic material.

4. The molded article of Claim 3 wherein said load bearing surface has apertures that are defined by the plurality of plastic reinforcing ribs of said external molded structure.

5. The molded article of Claim 1 wherein at least one of:

(I) said plurality of internal reinforcing ribs forms a continuous unitary structure within the hollow interior of each elongated shell; and

(II) said external molded structure is a continuous unitary structure.

6. The molded article of Claim 1 further comprising at least one further external molded structure of plastic material, a portion of each further external molded structure abutting a portion of the exterior surfaces of one elongated shell, a portion of the plastic material of said further external molded structure extends through at least some of said perforations of said elongated shell, the edges of said perforations being embedded in the plastic material of said further external molded plastic structure extending therethrough, thereby attaching fixedly said further external molded plastic structure to said elongated shell.

7. The molded article of Claim 6 wherein said further external molded structure comprises a plurality of reinforcing ribs of plastic material.

8. The molded article of Claim 1 wherein each elongated shell is independently fabricated from a material selected from metal, thermoset plastic material, thermoplastic material and combinations thereof.

9. The molded article of Claim 8 wherein each elongated shell is fabricated from metal.

10. The molded article of Claim 1 wherein at least some of said perforations are defined by deformed edge portions, said deformed edge portions being embedded in the plastic material extending therethrough.

11. The molded article of Claim 1 wherein the plastic material of said internal reinforcing ribs and said external molded structure are each independently selected from thermoset plastic materials, thermoplastic materials and combinations thereof.

12. The molded article of Claim 11 wherein the plastic material of said internal reinforcing ribs and said external molded structure is a thermoplastic material selected independently from thermoplastic polyurethane, thermoplastic polyurea, thermoplastic polyimide, thermoplastic polyamide, thermoplastic polyamideimide, thermoplastic polyester, thermoplastic polycarbonate, thermoplastic polysulfone, thermoplastic polyketone, thermoplastic polypropylene, thermoplastic acrylonitrile-butadiene-styrene and thermoplastic compositions containing one or more thereof.

13. The molded article of Claim 12 wherein the plastic material of at least one of said internal reinforcing ribs and said external molded structure is reinforced with a material selected from glass fibers, glass beads, carbon fibers, metal flakes, polyamide fibers, nanoparticulate clays, talc and mixtures thereof.

14. The molded article of Claim 1 wherein at least one of said elongated shells has at least one of a plurality of protrusions and a plurality of indentations, at least some of at least one of said protrusions and said indentations being embedded in the plastic material of at least one of said

internal reinforcing ribs and said external molded structure, thereby further fixedly attaching at least one of said internal reinforcing ribs and said external molded structure to said elongated shell.

15. The molded article of Claim 1 wherein at least one of said internal reinforcing ribs and said external molded structure is further fixedly attached to at least one elongated shell by attachment means selected from fasteners, adhesives and combinations thereof.

16. The molded article of Claim 1 wherein at least one of said elongated shells has terminal edges, at least a portion of said terminal edges being embedded in the plastic material of at least one of said internal reinforcing ribs and said external molded structure, thereby further fixedly attaching at least one of said internal reinforcing ribs and said external molded structure to said elongated shell.

17. The molded article of Claim 16 wherein the plastic material embedding said terminal edges therein is continuous with the plastic material of each of said internal reinforcing ribs and said external molded structure.

18. The molded article of Claim 1 wherein the plastic material of said internal reinforcing ribs extending through at least some of said perforations is continuous with the plastic material of said external molded structure.

19. The molded article of Claim 1 wherein each elongated shell is a substantially U-shaped elongated shell.

20. The molded article of Claim 1 wherein at least one of:

(I) said internal reinforcing ribs are formed by molding of plastic material onto the interior surfaces of said elongated shell, and a portion of

the plastic material of said internal reinforcing ribs extends through at least some of said perforations of said elongated shell, the edges of said perforations being embedded in the plastic material extending therethrough, thereby attaching fixedly said reinforcing ribs to said elongated shell; and

(II) said external molded structure is formed by molding of plastic material onto the exterior surfaces of said elongated shells, and a portion of the plastic material of said external molded structure extends through at least some of said perforations of said elongated shells, the edges of said perforations being embedded in the plastic material extending therethrough, thereby attaching fixedly said external molded structure to said elongated shells.

21. The molded article of Claim 20 wherein each of said internal reinforcing ribs and said external molded structure are formed by concurrently molding plastic material onto the interior and exterior surfaces of said elongated shells.

22. The molded article of Claim 21 wherein

at least one of said elongated shells has at least one of a plurality of protrusions and a plurality of indentations, at least some of at least one of said protrusions and said indentations being embedded in the plastic material of at least one of said internal reinforcing ribs and said external molded structure, thereby further fixedly attaching at least one of said internal reinforcing ribs and said external molded structure to said elongated shell, and

at least one of said elongated shells has terminal edges, at least a portion of said terminal edges being embedded in the plastic material of at least one of said internal reinforcing ribs and said external molded structure, thereby further fixedly attaching at least one of said internal reinforcing ribs and said external molded structure to said elongated shell.

23. The molded article of Claim 22 wherein the plastic material embedding said terminal edges therein is continuous with the plastic material of each of said internal reinforcing ribs and said external molded structure.

24. The molded article of Claim 23 wherein the plastic material of said internal reinforcing ribs extending through at least some of said perforations is continuous with the plastic material of said external molded structure.

25. The load bearing article of Claim 1 wherein said load bearing article is selected from shelves, walk-ways, palettes and flooring.

26. The load bearing article of Claim 1 wherein said load bearing surface comprises said external molded structure and at least one of: said plurality of elongated shells; and said plurality of internal reinforcing ribs.

27. A reversibly extendable load bearing structure comprising at least two load bearing articles, each load bearing article being joined to at least one adjacent load bearing article by means of a hinge, each load bearing article having an end that abuts an end of each adjacent load bearing article when said reversibly extendable load bearing structure is fully extended, wherein each of said load bearing articles comprises:

(a) a plurality of elongated shells residing substantially within a common plane, each of said elongated shells being separated one from the other and having exterior surfaces, interior surfaces which define a hollow interior, and a plurality of perforations having edges;

(b) a plurality of internal reinforcing ribs of plastic material located within the hollow interior of each elongated shell, a portion of said internal reinforcing ribs being in abutting relationship with the interior surfaces of each elongated shell;

(c) an external molded structure of plastic material residing between said elongated shells, a portion of said external molded structure being in abutting relationship with at least a portion of the exterior surfaces of said elongated shells; and

(d) a load bearing surface comprising said external molded structure,

further wherein,

(i) a portion of the plastic material of said internal reinforcing ribs extends through at least some of said perforations of each elongated shell, the edges of said perforations being embedded in the plastic material of said internal reinforcing ribs extending therethrough, thereby attaching fixedly said internal reinforcing ribs to each elongated shell, and

(ii) a portion of the plastic material of said external molded structure extends through at least some of said perforations of said elongated shells, the edges of said perforations being embedded in the plastic material of said external molded plastic structure extending therethrough, thereby attaching fixedly said external molded plastic structure to said elongated shells and attaching fixedly said elongated shells to each other.

28. The reversibly extendable load bearing structure of Claim 27 wherein the load bearing surface of each load bearing article together defines an extended load bearing surface when said reversibly extendable load bearing structure is fully extended.

29. The reversibly extendable load bearing structure of Claim 27 wherein each load bearing article has a longitudinal axis and a longitudinal end that abuts a longitudinal end of each adjacent load bearing article when said reversibly extendable load bearing structure is fully extended.

30. The reversibly extendable load bearing structure of Claim 27 wherein each load bearing article has a latitudinal axis and a latitudinal end that abuts a latitudinal end of each adjacent load bearing article when said reversibly extendable load bearing structure is fully extended.